6HZ6

Sharp-Cutoff Pentode

With Two Independent Control Grids

7-PIN MINIATURE TYPE

With Heater Having Controlled Warm-Up Time

GENERAL DATA

Electrical:

Heater Characteristics and Ratings *(Design-Maximum Values)*:

Voltage (AC or DC)	6.3[a]	6.3 ± 0.6	volts
Current	0.450 ± 0.030	0.450[b]	amp
Warm-up time (Average)	11	-	sec
Peak heater-cathode voltage:			
Heater negative with respect to cathode	200	max.	volts
Heater positive with respect to cathode	200[c]	max.	volts

Direct Interelectrode Capacitances (Approx):[d]

Grid No.1 to plate	0.023	pf
Grid No.1 to cathode & internal shield, grid No.3, grid No.2 & internal shield, and heater	8.2	pf
Grid No.1 to grid No.3	0.09	pf
Grid No.3 to plate	1.6	pf
Grid No.3 to cathode & internal shield, plate, grid No.2 & internal shield, grid No.1, and heater	7.2	pf

Characteristics, Class A_1 Amplifier:

Plate Supply Voltage	150	volts
Grid-No.3 Supply Voltage	0	volts
Grid-No.2 Supply Voltage	100	volts
Grid-No.1 Supply Voltage	0	volts
Cathode Resistor	180	ohms
Plate Resistance (Approx.)	0.11	megohm
Transconductance, Grid No.1 to Plate	3400	μmhos
Transconductance, Grid No.3 to Plate	600	μmhos
Plate Current	3.2	ma
Grid-No.2 Current	3.2	ma
Grid-No.1 Supply Voltage (Approx.) for plate μa = 20	-4.5	volts
Grid-No.3 Supply Voltage (Approx.) for plate μa = 20	-7	volts

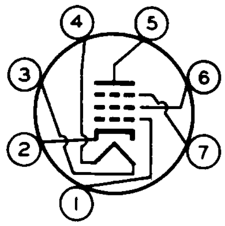
Mechanical:

Operating Position	Any
Type of Cathode	Coated Unipotential
Maximum Overall Length	2-1/8"
Maximum Seated Length	1-7/8"
Length, Base Seat to Bulb Top (Excluding tip)	1-1/2" ± 3/32"
Diameter	0.650" to 0.750"

6HZ6

Bulb. T5-1/2
Base. . . . . . .Small-Button Miniature 7-Pin (JEDEC No.E7-1)
Basing Designation For BOTTOM VIEW. 7EN

Pin 1 - Grid No.1
Pin 2 - Cathode, Internal Shield
Pin 3 - Heater



Pin 4 - Heater
Pin 5 - Plate
Pin 6 - Grid No.2, Internal Shield
Pin 7 - Grid No.3

FM SOUND-DETECTOR SERVICE

Maximum Ratings, *Design-Maximum Values:*

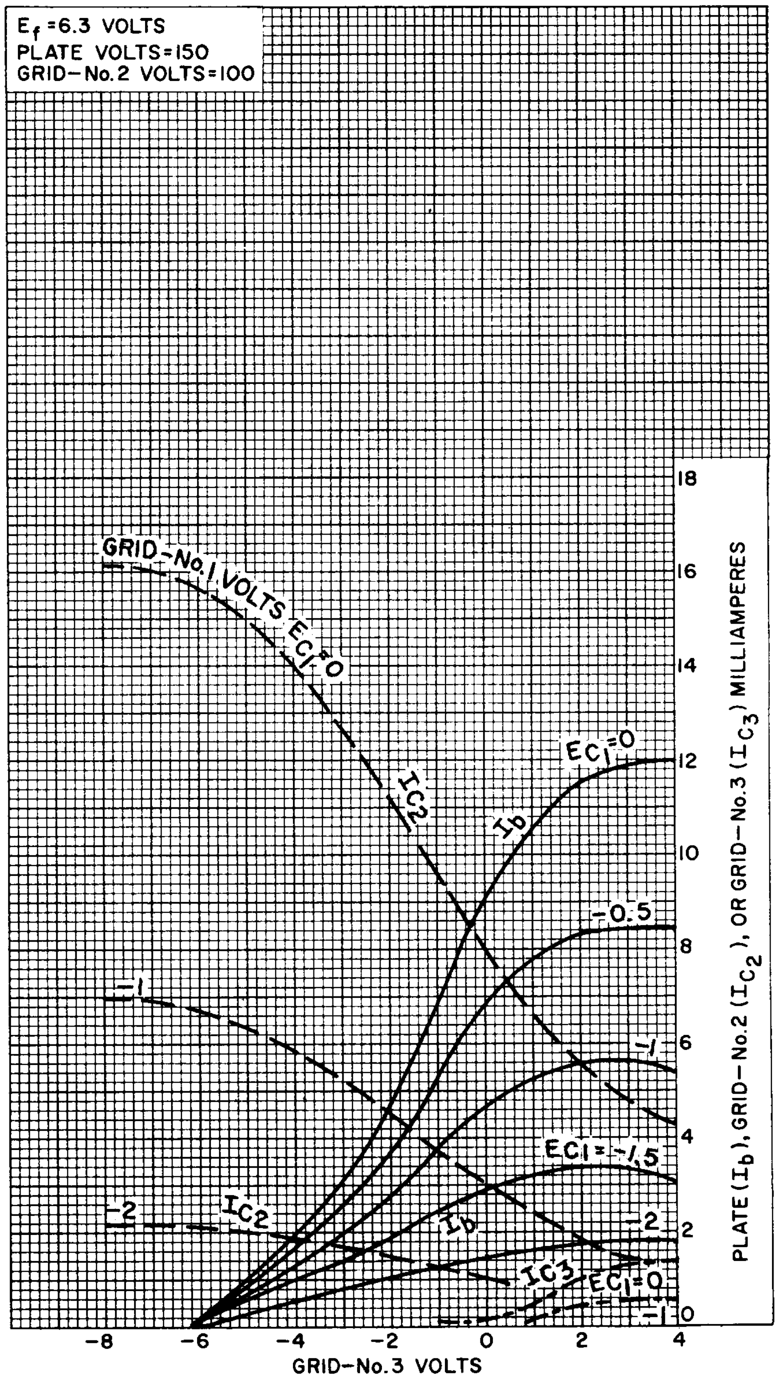
PLATE VOLTAGE	300	max.	volts
GRID-No.3 (CONTROL-GRID) VOLTAGE:			
Negative value (DC and peak).	100	max.	volts
Positive value (DC and peak).	25	max.	volts
GRID-No.2 (SCREEN-GRID) SUPPLY VOLTAGE. .	300	max.	volts
GRID-No.2 VOLTAGE . . . . . . See *Grid-No.2 Input Rating Chart* at front of Receiving Tube Section			
GRID-No.1 (CONTROL-GRID) VOLTAGE:			
Negative-bias value	50	max.	volts
Positive-bias value	0	max.	volts
GRID-No.3 INPUT	0.1	max.	watt
GRID-No.2 INPUT:			
For grid-No.2 voltages up to 150 volts	1	max.	watt
For grid-No.2 voltages between 150 volts and 300 volts . See *Grid-No.2 Input Rating Chart* at front of Receiving Tube Section			
PLATE DISSIPATION	1.7	max.	watts

Maximum Circuit Values:

Grid-No.3-Circuit Resistance.	0.68	max.	megohm
Grid-No.1-Circuit Resistance:			
For fixed-bias operation.	0.22	max.	megohm
For cathode-bias operation.	0.47	max.	megohm

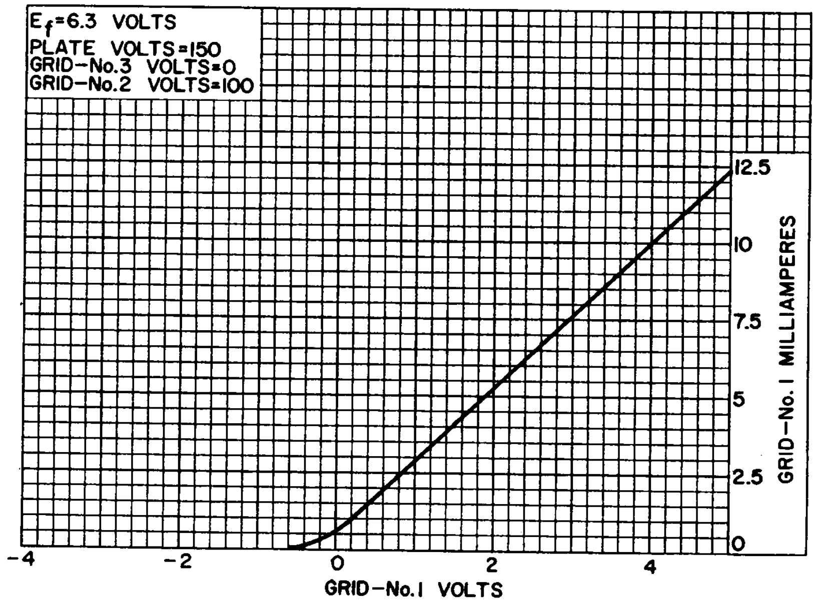
[a] At heater amperes = 0.450.
[b] At heater volts = 6.3.
[c] The dc component must not exceed 100 volts.
[d] Without external shield.

AVERAGE CHARACTERISTICS



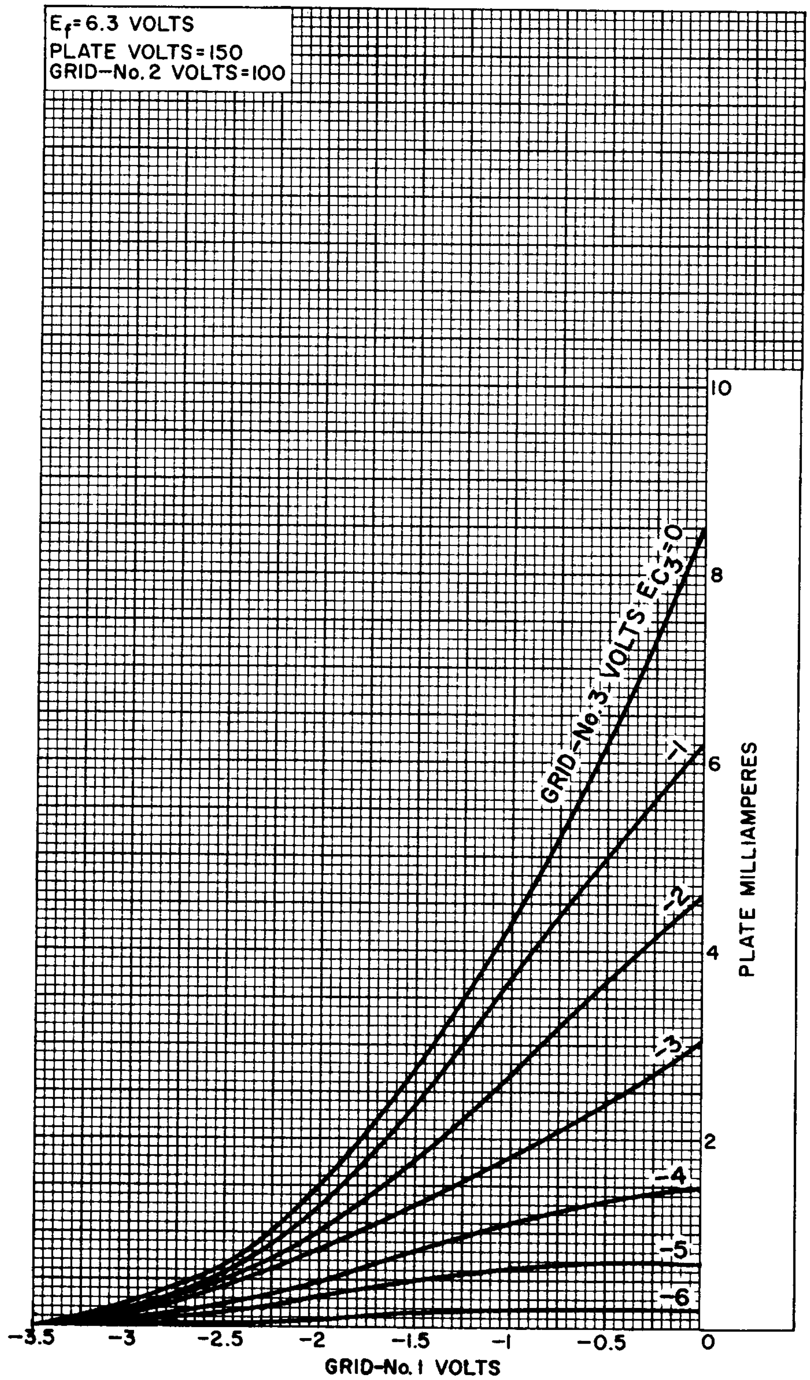
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AVERAGE GRID-No.1 CHARACTERISTIC



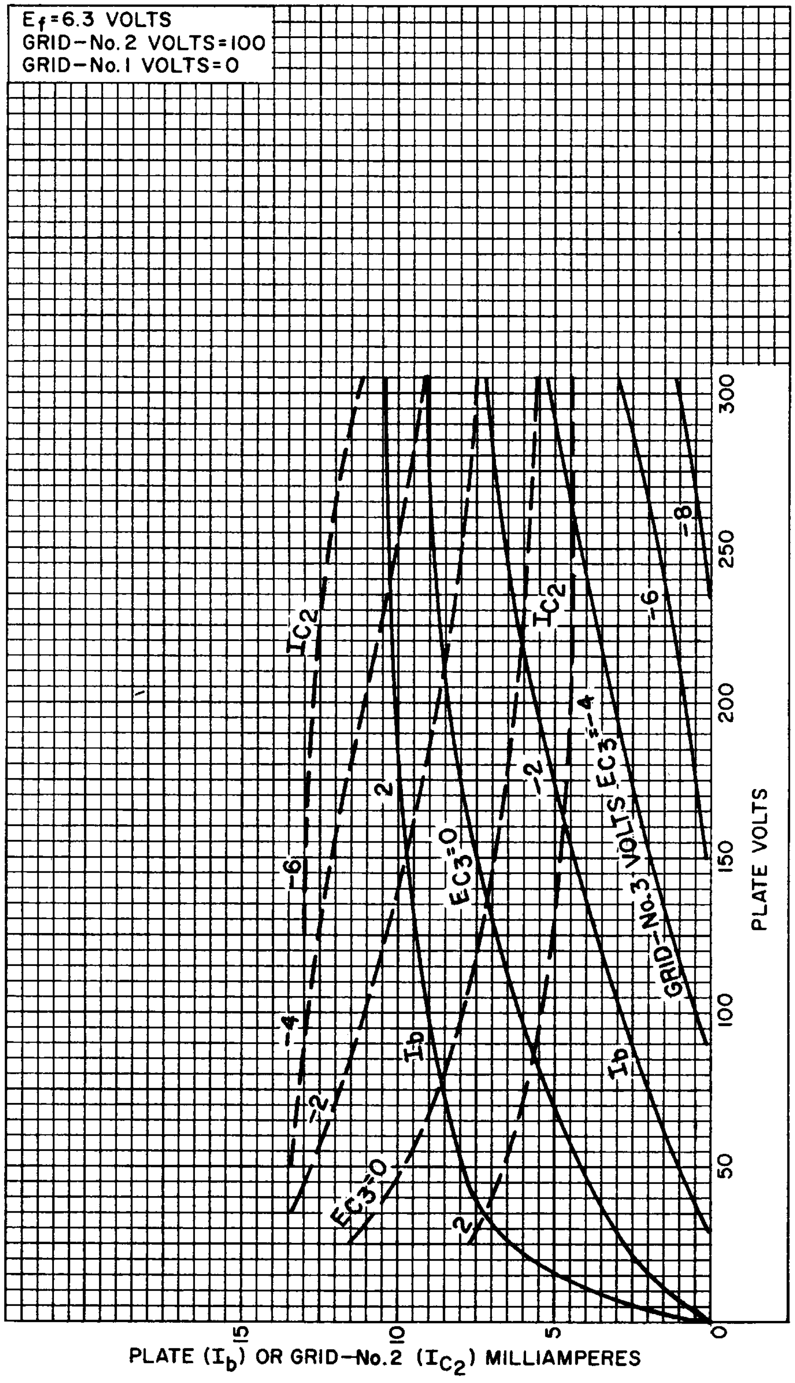
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AVERAGE CHARACTERISTICS



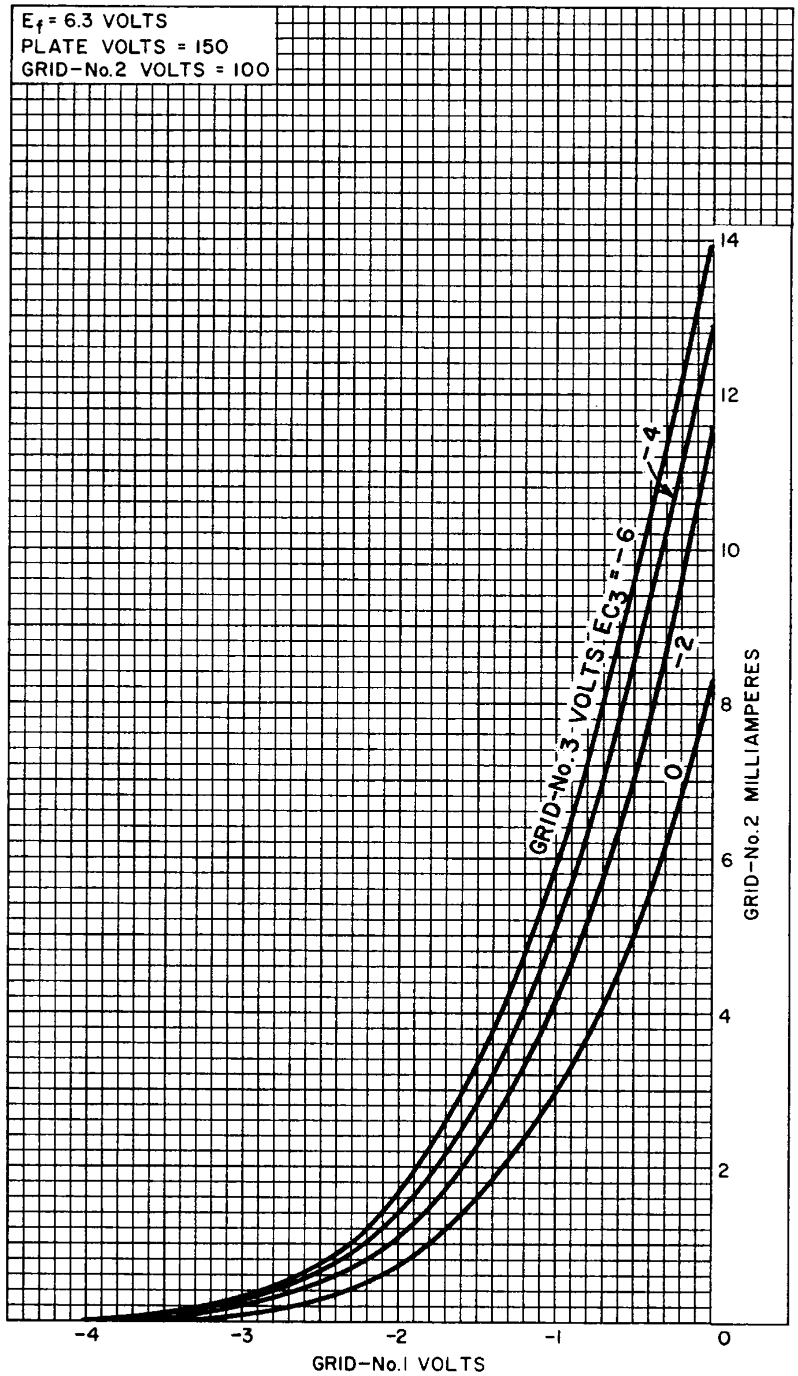
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AVERAGE CHARACTERISTICS



92CM-11793

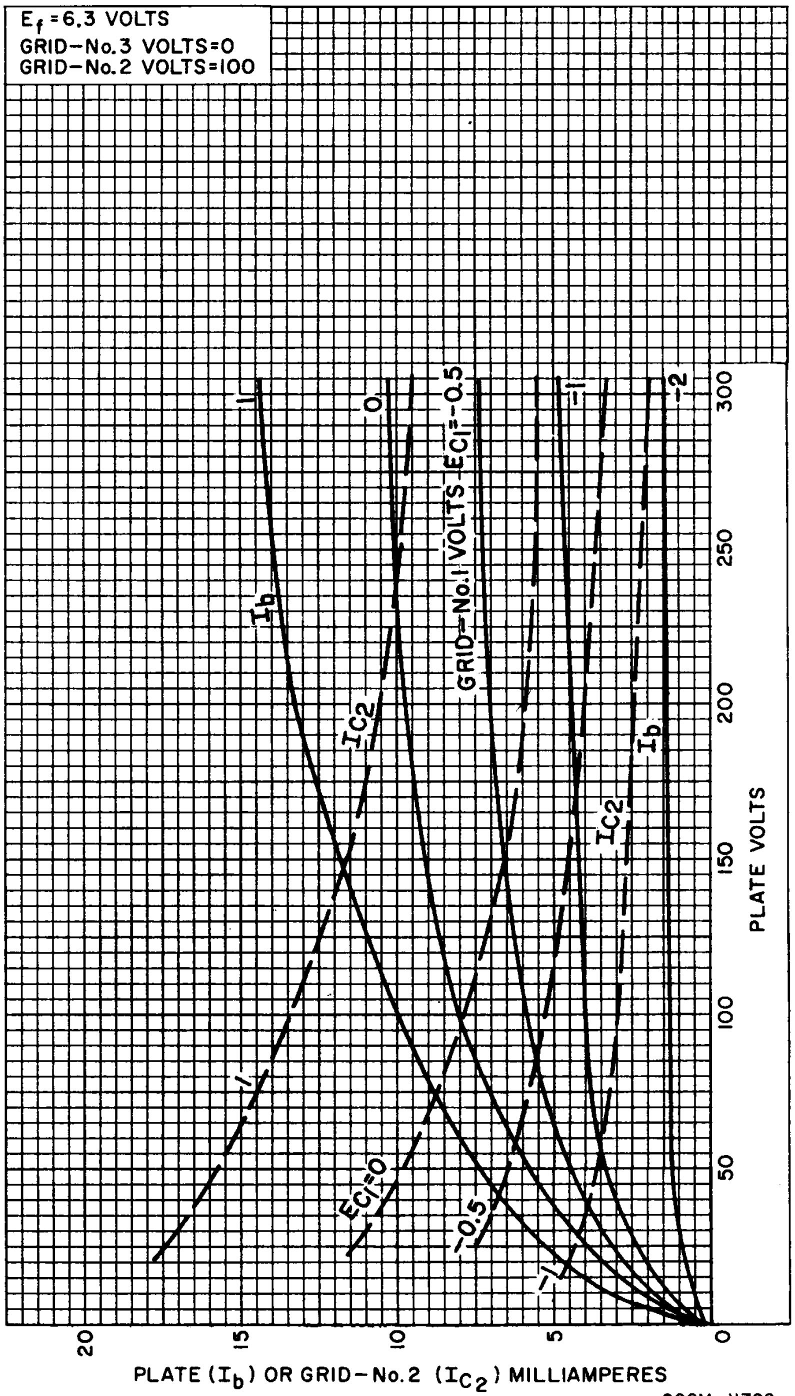
AVERAGE CHARACTERISTICS



92CM-11791

6HZ6

AVERAGE CHARACTERISTICS



92CM-11792